

1 or 2 Decks

## IRON OR STEEL STEAMER.

Received at London Office

194

State if Report is also sent on the Machinery of the Vessel

Date of completion of Report September 1890. Port of Middleboro

No. 194 Survey held at Stockton Y. Date, First Survey 28<sup>th</sup> April 1890 Last Survey 19<sup>th</sup> September 1890.

On the Crew Steamer

"Clynehead"

(Yard No. 250) Rig R. Palmer

Master John Thomas Y. Carr.

TONNAGE under

Tonnage Deck 1716.20

Do. of Poop 73.36

Do. of Raised Or. 128.54

Do. of Bridge House 219.60

Do. of Houses on Deck 4.99

Do. of excess of Hatchways 19.28

Do. of Forecastle 139.48

Do. of Crown of Engine Room 22.40

Gross Tonnage 2202.12

as Crew Space 36.88

as above Crown of Engine Room 22.40

as Navigation Spaces 42.69

Register Tonnage 1461.88

as cut on Beam 1461.88

ONE OR TWO DECKED VESSEL.

CLASS 100 A 1<sup>st</sup> class.

FEET.

Half Breadth (moulded) 19.28

Depth from upper part of Keel to top of Main Deck 22.48

Girth of Half Midship Frame (as per Rule) 37.75

1st Number 79.83

Length 240.58

2nd Number 216.00

Proportions—Breadths to Length 6.9

Depths to Length—Main Deck to top of Keel 11.9

Destined Voyage Yarn to Load.

Year of appointment (1) As master in service of owner of present vessel: 1890 (2) As master of this vessel: 1890.

Built at Stockton

When built 1890 Launched 2-8-90

By whom built Ropner &amp; Son

Owners C. Furness

Managers J.

(Where necessary to be entered in Reg. Book).

Residence West Hartlepool.

Port belonging to London.

If Surveyed while Building, Afloat, or in Dry Dock Yes.

LENGTH on Deck as per Rule	FEET.	INCHES.	BREADTH—Moulded	FEET.	INCHES.	DEPTH—Top of Floors to Main Deck Beams	FEET.	INCHES.	Power of Engines	Horse.	No. of Decks with Flat laid	No. of Tiers of Beams
240	7		38	8		18	8 1/2		200		One iron	14 ft.

Dimensions of Ship per Register, Length, 240.58 breadth, 38.9 depth, 18.65.

Moulded Depth, ft. 21 ins. 11

Round of Beam 10 1/2 inches.

## FORGINGS AND CASTINGS.

KEEL, Bar or Side Plates depth and thickness 10 x 1

STEM, moulding and thickness 10 x 2 1/2

STERN-POST for Rudder do. do. 10 x 5 1/2

" " for Propeller 10 x 5 1/2

MAIN PIECE of Rudder, diameter at head 7 1/2

" " do. at heel 5 1/2

RUDDER, how constructed Forged iron frame, plates in usual manner

on the Rudder be unshipped afloat? Yes.

## FRAMING.

RAIL, Angles, on 7 Bars, for 2 length amidships 5 3 8 5 3 8

Do. for 1/2 at each end 5 3 7 5 3 7

Do. in way of Double Bottoms 3 1/2 3 1/2 7 3 1/2 3 1/2 7

Distance of Frames from moulding edge to moulding edge, all fore and aft 24

INVERSED FRAME, Angles 3 1/2 3 8 3 1/2 3 8

FLOORS, depth and thickness of Floor Plate at mid-line for 2 length amidships 38

" " in way of Engines and Boilers 38

" " thickness at the ends of vessel 38

" " depth at 3/4 the half breadth, as per Rule 38

" " height extended at the Bilges 38

FLOORS &amp; BRACKETS, in Cell Dble Bottoms 38

" " Distance apart 24

CENTRE GIRDER, in Double Bottom, depth and thickness 48

" " Angles, Top 4 4 9 4 4 9

" " Angles, Bottom 3 1/2 3 1/2 7 3 1/2 3 1/2 7

MARGIN PLATE, depth (exclusive of flange) and thickness 24

" " Angles 3 1/2 3 8 3 1/2 3 8

INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake 36

" " thickness in Engine and Boiler space 36

" " Remainder in Holds 36

BEAMS, Main and Raised Quarter Deck, Single Angle, Bulb Angle, Plate or Tee Bulb 6 1/2 3 9 6 1/2 3 9

" " Angles on Upper Edge 24

" " Average space 24

BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb 10-9 9 10-9 9

" " Angles on Upper Edge 3 1/2 3 7 3 1/2 3 7

" " Average space 10-9

BEAMS, Hold, Plate or Tee Bulb 6 1/2 3 9 6 1/2 3 9

" " Angles on Upper Edge 24

" " Average space 24

BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb 6 1/2 3 9 6 1/2 3 9

" " Angles on Upper Edge 24

" " Average space 24

BEAMS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb 5 3 7 5 3 7

" " Angles on Upper Edge 24

" " Average space 24

BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb 5 3 7 5 3 7

" " Angles on Upper Edge 24

" " Average space 24

PILLARS, in 'tween Decks, Size and Spacing 2 1/2 spaced as per Rule

" " Hold 2 1/2

WEB FRAMES, in Fore Body, No. and Spacing Eight pairs in 10 ft. spaces

" " Breadth &amp; Thickness 16 8.4 16 8.4

" " No. of Side Stringers 16

WEB FRAMES, in After Body, No. and Spacing Four pairs in 10 ft. spaces

" " Breadth &amp; Thickness 16 8.4 16 8.4

" " No. of Side Stringers 16

" " Size of Angles or Tee Bars to Web Frames 3 1/2 3 1/2 8.4 3 1/2 3 1/2 8.4

BRACKET PLATES to Stringers between Web Frames, Depth and Thickness 18 8 18 8

## KEELSONS AND STRINGERS.

CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate

" " Rider Plate 10 x 1

" " Bulb Plate to Intercoastal Keelson 10 x 1

" " Horizontal Plates on Floors 10 x 1

" " Angles 10 x 1

SIDE KEELSON, Angles 10 x 1

" " Bulb or Plate above floors for length 10 x 1

" " Intercoastal Plate for length 10 x 1

" " Attached to outside plating with Angle 10 x 1

BILGE KEELSON, Angles 10 x 1

" " Bulb or Plate above floors for length 10 x 1

" " Intercoastal Plate for length 10 x 1

" " Attached to outside plating with Angle 10 x 1

BILGE STRINGER Angles 10 x 1

" " Bulb Plate for length 10 x 1

" " Intercoastal Plate for length 10 x 1

" " Attached to outside plating with Angle 10 x 1

SIDE STRINGER Angles 10 x 1

" " Bulb or Intercoastal Plate for length 10 x 1

Main and Raised Quarter Deck Stringer Plate, on ends of Beams, breadth &amp; thickness 38 10 38 10

" " Angle on ditto 4 1/2 x 4 1/2 9 4 1/2 x 4 1/2 9

" " Tie Plates fore &amp; aft, outside Hatchways 4 1/2 x 4 1/2 9 4 1/2 x 4 1/2 9

" " Diagonal Tie Plates on Beam, No. of Plates 7 openings 13 1/2 7 13 1/2

" " Flat of Deck\* Material and thickness 3/4 3/4 3/4 3/4

" " Wood\* Material and thickness 1 1 1 1

" " How fastened to Beams Riveted

Lower Deck Stringer Plate, on ends of Beams, breadth &amp; thickness 34 9 34 9

" " Angles on ditto, No. 4 1/2 x 3 1/2 7 4 1/2 x 3 1/2 7

" " Tie Plates, outside Hatchways 4 1/2 x 3 1/2 7 4 1/2 x 3 1/2 7

" " Flat of Deck\* Material and thickness 3/4 3/4 3/4 3/4

" " How fastened to Beams Riveted

Hold Stringer Plate, on ends of Beams 24 7 24 7

" " Angles on ditto, No. 3 1/2 x 3 1/2 7 3 1/2 x 3 1/2 7

Poop Deck Stringer Plate, breadth &amp; thickness 24 7 24 7

" " Angle on ditto 3 1/2 x 3 1/2 7 3 1/2 x 3 1/2 7

" " Tie Plates 3 1/2 x 3 1/2 7 3 1/2 x 3 1/2 7

" " Flat of Deck, Material and thickness 3/4 3/4 3/4 3/4

Bridge Deck Stringer Plate, breadth &amp; thickness 38 9 38 9

" " Angle on ditto 4 1/2 x 4 1/2 9 4 1/2 x 4 1/2 9

" " Tie Plates 4 1/2 x 4 1/2 9 4 1/2 x 4 1/2 9

" " Flat of Deck, Material and thickness 3/4 3/4 3/4 3/4

Forecastle Deck Stringer Plate, breadth &amp; thickness 24 7 24 7

" " Angle on ditto 3 1/2 x 3 1/2 7 3 1/2 x 3 1/2 7

" " Tie Plates 3 1/2 x 3 1/2 7 3 1/2 x 3 1/2 7

" " Flat of Deck, Material and thickness 3/4 3/4 3/4 3/4

## PLATING.

FLAT PLATE KEEL, breadth and thickness 36 12 36 12

" " d'bling or incr'd thickness, &amp; length appl. 36 12 36 12

PLATES in Garboard Strakes, breadth &amp; thickness 36 12 36 12

" " From Garboard to lower part of Bilges 36 12 36 12

" " Bilges, number of Strakes and thickness 11-12 11-12 11-12 11-12

" " Of doubling at Bilge, or increased thickness, &amp; length applied 11-12 11-12 11-12 11-12

" " from up. part of Bilge to edge of Sh'strake 11 11 11 11

Sheerstrake, breadth and thickness 42 15 42 15

" " Of d'bling at Sh'strake &amp; lng. applied at bridge front for 20 ft. 42 15 42 15

Poop Sides 10 10 10 10

Raised Quarter Deck Sides 10 10 10 10

Bridge Sides 9 9 9 9

Forecastle Sides 9 9 9 9

Lengths of Plating Run frame spaces, and under at ends.



Ceiling betwixt Decks, thickness and material *2" Pine*  
 " in hold do. do. *2" Pine*  
 Number of Breasthooks *Seven*  
 " Crutches *Three*

BULKHEADS.	No. in Vessel	Thickness.	Angles.	Spacing.	No. Req'd. by Rule	Height up.	Sngl. or Dbl. Frames.
W. T. BULKHEADS	<i>Four</i>	<i>4-6</i>	Vrtcl. <i>5-5 1/2</i> Hrzncl. <i>5-5 1/2</i>	<i>20</i> <i>48</i>	<i>Four</i>	<i>Up to Upper Deck, and double frames.</i> <i>to R. 2nd, &amp; one to Pop Deck</i>	
PARTITION...			Vrtcl. <i>5-5 1/2</i> Hrzncl. <i>5-5 1/2</i>				
LONGITUDINAL.			Vrtcl. <i>5-5 1/2</i>				

Are the outside Plates doubled two spaces of Frames in length? *Yes, as approved.*  
 The FRAMES extend in one length from *M. L. to Flange plate, thence to Cummer*  
 The REVERSED ANGLE on floors and frames extend from *Middle line to above upper stringer and to upper deck alternately, alternate ones to*  
*Forecastle deck, and all to Pop Deck at aft of bulkhead.*

**RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.**  
 Carboard, double riveted to Bar Keel *on Flat Plate Keel*, with rivets *1/8* in. diameter, averaging *5 1/2* ins. from centre to centre.  
 Edges of Carboards and to upper part of Bilge, worked clencher, double riveted; with rivets *5/8* in. diameter, averaging *3 1/2* ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, treble or double riveted; treble for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.  
 " " " overlapped for *1/2* length, treble riveted for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.  
 Butts of *all* Strakes *at Bilge* for *1/2* length, treble riveted with Butt Straps *3/4* thicker than the plates they connect. *excepting those of*  
*at Flange plate, which are overlapped and treble riveted.*  
 Edges from Bilge to Sheerstrake, worked clencher, double or single riveted; with rivets *5/8* in. diameter, averaging *3 1/2* ins. from centre to centre.  
 Butts from Bilge to Sheerstrake, worked carvel, treble or double riveted; treble for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.  
 " " " overlapped for *1/2* length, treble riveted for *1/2* length; with rivets *5/8* in. dia., averaging *3 1/2* ins. from cr. to cr.  
 Edges of Sheerstrake, double or single riveted. Butts of Sheerstrake, treble riveted for *1/2* length amidships.  
 Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. *Single or Double Butt Straps to Stringer Plate for 1/2 length.*  
 Butts of Inner Bottom Plating *double* riveted for *1/2* length. Butts of Centre Girder *treble* riveted. *(double Straps)*  
 Breadth of edge laps of Shell Plating in double riveting *5 1/2 x 4 1/2*. Breadth of edge laps of Shell Plating in single riveting *5 1/2*  
 Butt Straps of Shell Plating breadth and thickness *19. 16 1/2 x 9 1/2 x 16-14-9*. Butts, if Lapped, breadth of laps *9*  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble or double riveted? *treble & double*  
 Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie and Stringer Plates, Outside  
 Plating, &c. *Steel plates. Messrs. Corbett & Steelton Middlesbrough. Steel angles & bulbs. Dorman Long & Co. & Messrs. Iron plates. Messrs. Corbett & Steelton Middlesbrough. Iron angles & bulbs. South & Steelton & Steelton Middlesbrough.*  
 Workmanship. Are the butts of plating planed or otherwise fitted? *Planed.*  
 Is the riveted work properly closed? *Yes.*  
 Are the liners between the frames and plates solid single pieces? *Yes.* Do the holes for riveting plate to frames, butt straps, or plate  
 to plate, &c., conform well to each other? *Yes.* Are the rivet holes well and sufficiently countersunk in the plate and punched  
 from the faying surfaces? *Yes.* Do any rivets break into or through the seams or butts of the plating? *4 in. at the bulk only.*  
 Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes.*

MASTS, SPARS, &c.											
	Material.	Total Length	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hoards.	Head.		Number.	Size.	Seams.	Butts.
LOWER MASTS....	Fore .....	Iron 68'-11"	14½ x 5/8	13½ x 5/8	14¾ x 5/8	11½ x 5/8	Yes	—	—	Single	Treble & double
	Main .....	Iron 66'-4"	14½ x 5/8	13½ x 5/8	14¾ x 5/8	11½ x 5/8	Yes	—	—	Single	Treble & double
	Mizen .....	—	—	—	—	—	—	—	—	—	—
Bowsprit	—	—	—	—	—	—	—	—	—	—	—
Topmasts, Yards and Remainder of Spars Pitch Pine. Sufficient in size and good in quality.											
Rigging, Material and Size, Shrouds 6.1" Manila Chromo 14" 6.1" Manila. Stays 4" 6.1" Man.											
Sails. One complete. Suit of sails. Sails, and the following spare sails.											

EQUIPMENT No. 24080										LETTER N.		ANCHORS.					
Number of Certificate.		WEIGHT, EX. STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE.			WEIGHT REQ. BY RULE			Description of Anchor.	Makers.	Where and when tested and Superintendent.	
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.	qrs.				lbs.
20661	1st Bower ..	30	5	21	4	0	14	29	7	2	0	30	0	0	Rodgers patent	Lumadon (Ct.)	25-7-90 Tested at R.M.C.P.
20670	2nd „ ..	30	2	0	7	1	21	29	0	0	0	30	0	0	„	„	30-7-90 Tested by J. Hartness
20667	3rd „ ..	25	3	0	6	3	21	25	8	0	14	25	2	0	„	„	30-7-90
	Collective weight	84	0	21								85	2	0			
12683	Stream ...	9	2	0	2	1	10	11	11	1	0	9	2	0	Common	J. Green	31-7-90 Tested at Dept.
12682	Kedge.....	4	3	11	1	0	14	7	5	0	0	4	3	0	„	J. Green	31-7-90 by E.R. Smith.
16736	2nd Kedge..	2	2	14	-	2	14	5	2	2	0	2	2	0	„	C.H. Reed	15-11-84 by J. Hartness.

**CHAIN CABLES.**

Number of Certificate.	Fathoms.	Size.	Test per Certificate.	Weight of Chain Cable	Fathoms & Size.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	FATHOMS AND SIZE.	
										Fathoms.	Size.
8565	135	1 1/2	4 1/2 tons	198-3-8	270-1 1/2	Standard	John Green	28-7-90 Tested at R.M.C.P. by J. Hartness.	Towline	90	3
8566	135	1 1/2	4 1/2 tons	198-1-23					Hawser	90	3
										90	3 1/2

Boats *Two life boats (23 feet) and two lobby boats 20 feet and 18 feet.*  
 Pumps, Number *Five hand pumps* Diameter of Barrel and Tail Pipe *Barrel 6" Tail pipes 3 1/2"*  
 The Windlass is *Gimerson Walker & Co* Capstan *Four steam winches.*  
 Engine Room Skylights.—How constructed? *Of iron on iron coverings*  
 What arrangements for deadlights in bad weather? *Dark flaps with bolts eyes.*  
 Coal Bunker Openings.—How constructed? *Wrought iron* How are lids secured? *Latch bars* Height above deck? *2 1/2 x 5 1/2*  
 Number of Scuppers, and number and dimensions of *Freeing Ports, &c.* *Two scuppers on each side in M. L. and four on each side on R. 2nd 5 1/2*  
*Two freeing ports on each side in M. L. 37-24 and four on each side on Raised Quarter Deck 24-18.*  
 Cargo Hatchways.—How formed? *Iron plates and angles in the usual manner* Hatches, if strong and efficient? *Yes for solid*  
 State size No. 1 Hatch (Forward) *16-0 x 15-0* No. 2 Hatch *26-0 x 14-0* No. 3 Hatch *24-0 x 14-0* No. 4 Hatch *22-0 x 14-0*  
 Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *One web plate beam in No. 1, two web plates & partition bulkhead in*  
*No. 2, and two web plates in No. 3 & 4. Three iron fore and afters in each.*  
 Bulwarks, height above deck and description *Treated with flat bridge gunwale in M. L. 2 1/2" plates* Main Rail, material and size *bulk angles 6 x 3 1/2*  
 The above is a correct description.  
 Builder's Signature, (here only) *RORNER & SON.*  
 Surveyor's Signature *Wm. Williams*  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1-A

Order for Sp... Date...  
 Order for Or... Date...  
 No. 250  
 State date...  
 General...  
 The ap...  
 letter...  
 with...  
 accor...  
 have...  
 Reference should be made to any correspondence connected with the case.  
 PARTIC...  
 (in feet...  
 Prop. h...  
 No. and M...  
 should s...  
 Official...  
 PARTIC...  
 Double...  
 Double...  
 Double...  
 Fore pe...  
 Midship...  
 Th...  
 (If ne...  
 How ar...  
 FREEBO...  
 State if ma...  
 The amou...  
 Trav...  
 Man...  
 of op...  
 Comm...  
 Charac...



Order for Special Survey No 1429

Date 6<sup>th</sup> December 1889

Order for Ordinary Survey No

Date

No. 250 in builder's yard

DATES OF SURVEYS  
held while building  
as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the process of riveting
- 3rd. When the beams were in and fastened, and before the decks were laid
- 4th. When the ship was complete, and before the plating was finally coated or cemented
- 5th. After the ship was launched and equipped

First visit 28<sup>th</sup> April 1890

Last visit 19<sup>th</sup> September 1890

Total No. of Visits 35

State dates and initials of letters respecting this case 3<sup>rd</sup> December 1889 (M), 15<sup>th</sup> January (M) & 21<sup>st</sup> May 1890 (P)

General Remarks (State quality of workmanship, &c.) This steel screw steamer has been built in accordance with the approved photo-prints of Midship Section and Profile as amended. The Secretary's letters of the above-mentioned date bearing on the case, and in general conformity with the Rules for the Class contemplated. The workmanship is good throughout. The steel used in her construction has been tested at the Steel works in accordance with the requirements of the Rules by the Society's Surveyors; and iron rivets have been used throughout.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 26.75 ft., R.Q.D. or Break 84 ft., Bridge Dk. 108 ft., F'castle 29.5 ft. (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated Sum Poop. Poop, Raised Quarter Deck, and Bridge Deck Combined.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 1 all iron (not wood covered); 1 1/2 ft. x 10 ft. web frames

Official No. ; Signal Letters

#### PARTICULARS OF WATER BALLAST.

Double bottom, aft, length and water capacity in tons Double bottom, forward, length and water capacity in tons

Double bottom, under engines and boilers, length and water capacity in tons If under Engines only, or Boilers only, state which

Double bottom, constructed on the cellular system, length 224 feet and water capacity in tons 435

Fore peak tank, water capacity in tons After peak tank, water capacity in tons

Midship deep tank, length and water capacity in tons Other tanks, if fitted, length and water capacity in tons

The above have all been tested as required by the Rules.

(If necessary, furnish further information by sketch.)

How are the surfaces preserved from oxidation? Inside Portland Cement and Paint Outside Paint

FREEBOARD assigned by the Committee, as per Secretary's

Letter, dated

In Summer ft. ins.

In Winter ft. ins.

For Winter in North Atlantic ft. ins.

Fresh Water above the centre of disc ft. ins.

To top of Wood, Iron or Steel Upper Deck.

State if marked on Vessel's sides in accordance with Notice No. 572

The amount of Entry Fee, £ 5 : 0 : 0 is received by me, H.H.T.

Special ... £ 80 : 10 : 0 1-10-1890

Certificate\* £

Travelling Expenses, if any £

of opinion this Vessel should be Classed 100A1 Steel

C. Davidson & Co. Surveyors  
Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI 3 OCT 1890

Character assigned

A+C.P.

100A1 Steel

15k (Iron) + Web frames

+ 2mc 9.90 Well deck

Th

It is submitted that this vessel appears eligible to be classed 100A1 (steel) as recommended: "One deck (iron) and web frames" "Cellular double bottom (particulars above)" "Well Deck"